

terminal capsules 5–15 mm long; seeds 10–25 per capsule, irregularly angled, 1.2 mm long by 0.8 mm wide, the surface with small pointed to truncate papillae.

DISTRIBUTION (fig. 4): On grey clay of high desert hills along the Utah-Colorado border, 1200 to 1800 m.

Flowering time for both species is mid-May to late June. *Mentzelia thompsonii* has been identified both as *M. mollis* and *M. dispersa* in the past, but it is morphologically very different from both.

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A NEW SPECIES OF CHOLLA (CACTACEAE: OPUNTIA) FROM COAHUILA, MÉXICO

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A floristic study of the Bolsón of Cuatro Ciénegas and surrounding mountains, Coahuila, México, has revealed a new species of cholla (Cactaceae: *Opuntia* subg. *Cylindropuntia*). It was first found growing on an open, gently sloping, south-facing bajada near the base of Mt. Anteojo of the Sierra de la Madera. Additional collections have extended the range to three other contiguous basins to the west and south.

Opuntia anteojoensis D. J. Pinkava, sp. nov. Frutex demissus, 0.3–1.0 m altus, intricate ramosissimus. Rami ultimi 2–3 cm longi, circa 8 mm diametro tuberculis rhombicis elevatis circa 5 mm latis, 8 mm longis. Areolae pubescentes, elongatae, inter bases tuberculorum duorum contiguum sursum extensae, spinis principalibus porrectis solitariis ad areolas supernas pro parte maxima restrictis, subcylindraceis 2.5–7.0 cm longis, 0.7–1.0 mm diametro, nigris, apicibus porphyreis glochiadatis, vaginis transluscentibus ad apices ochraceis, spinis accessoris porphyreis utque ad 4 mm longis rarer praesentibus, glochidiis aliquot albidis 1–2 mm longis. Flores terminales vel subterminales in ramis brevibus, solitarii vel 2–4 in fasciculis, rotati, utque ad 4 cm diametro, tepalis coloratis 10–20 luteis, mucronatis, margine undulatis vel erosis. Fructi sicci, subcylindracei, 1.5–2.5 cm longi, 10–12 mm diametro, lappacei, spinis flexibilibus atrobrunneis apice aureis utque ad 20 mm longis spinosissimi, areolis trichomis aureis copiose pubescentibus, perianthio persistenti. Semina circa 10–20 per fructum, $5.0 \times 4.5 \times 2.0$ mm, arillo cretaceo farinoso angulari.

TYPE: México, Coahuila, ca 21 km W of Cuatro Ciénegas on road to Esmeralda ($26^{\circ} 56' N$, $102^{\circ} 15' W$), matorral desertico inerme, 800 m elev., sloping bajada near S face of Sierra de la Madera, 7 May 1973, *M. C. Johnston, T. L. Wendt, and F. Chiang C. 10911* (in flower). Holotype: LL. Isotypes: ASU, remainder to be distributed. Paratypes: México, Coahuila: 16 km W of Cuatro Ciénegas ($26^{\circ} 58' N$, $102^{\circ} 10' W$), *Johnston, Wendt, and Chiang 9151* (ASU, LL); ca 6 mi W of Poso Antejo, *Meyer s.n.* (in fruit) (ASU, DES, ENCB), *Lehto, Keil, and Pinkava P5527* (ASU, LL), *Pinkava 10512–10513* (ASU); 18.5 km S of turnoff to Sta. Sofia, Cuatro Ciénegas-Torreon highway ($26^{\circ} 35' N$, $102^{\circ} 23' W$), *Johnston, Wendt, and Chiang 10988* (in flower) (ASU, LL); E side of Valle de Sobaco, ca. 15 air km SE of Las Margaritas ($26^{\circ} 24' N$, $102^{\circ} 43' W$), *Chiang, Wendt, and Johnston 9466* (in fruit) (LL); 12.5 km NW of Los Colorados toward Palomas and Cuatro Ciénegas ($26^{\circ} 14' N$, $101^{\circ} 44' 30'' W$), *Johnston, Wendt, and Chiang 11724* (ASU, LL).

Opuntia anteojoensis, endemic to the Chihuahuan Desert, appears most closely related to *O. ramosissima* Engelm. The latter occurs in the Sonoran Desert, its range centering about the lower Colorado River in Arizona, California, Nevada, and Sonora. More than 1500 km separate the known ranges of these two taxa.

Both species are represented by low, intricately branched shrubs, their branches bearing rhombic tubercles with elongate areoles extending upward between the two adjacent tubercles above, and the uppermost areoles bearing a long porrect spine. Fruits are dry, maturing as burs. The two cacti differ in that *O. anteojoensis* has raised tubercles and yellow flowers whereas *O. ramosissima* has flattened, plate-like tubercles and apricot to brown flowers (fig. 1). The stems of *O. anteojoensis* commonly bear fewer spines and in age usually become thicker than those of *O. ramosissima*.

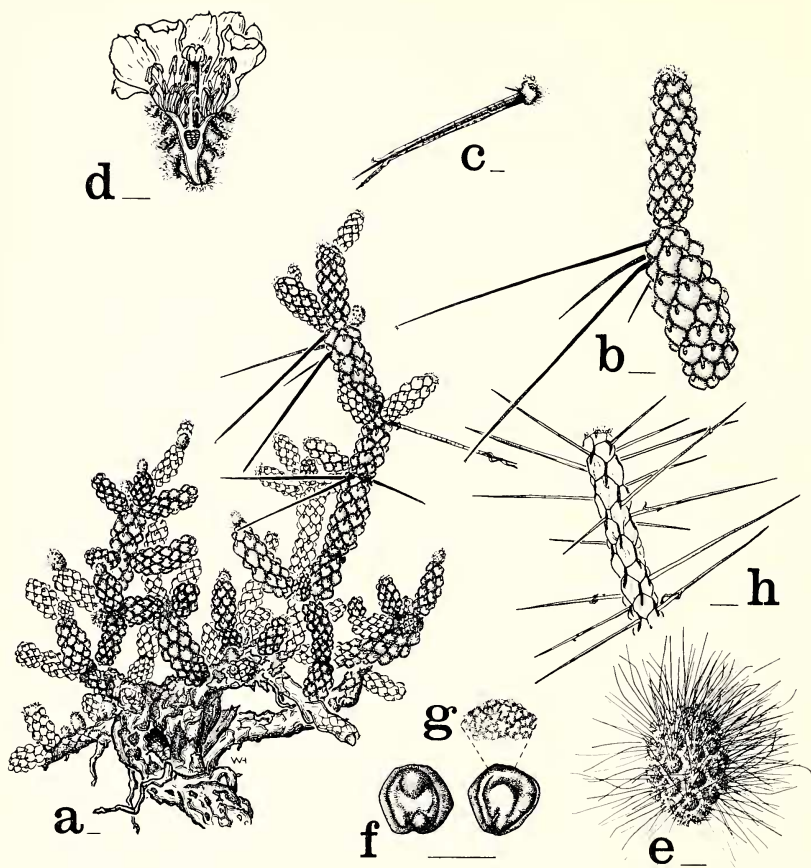


FIG. 1. *Opuntia anteojoensis*. a, habit (Pinkava 10512); b, stem tip enlarged (Pinkava 10522); c, spine and sheath (holotype); d, flower (holotype); e, mature fruit (Meyer s.n.); f, g, seeds (Meyer s.n.); h, stem tip of closely related *O. ramosissima* (Reeves and Pinkava P11738) illustrating detailed differences in tubercle shape, size, and arrangement. Scale line = 5mm.

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